

Attny. Docket No.: 2003-0393/N1085-90166

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

1 -34.(Cancelled)

35.(New) A method of depositing a carbon doped SiO₂ film on a substrate, the method comprising the steps of:

flowing oxygen, argon, and one of dimethylsilane, trimethylsilane, and tetramethylsilane, over the substrate at a flow rate ratio of about 1:1.5:6;

generating a plasma to deposit the carbon doped SiO₂ film on the substrate; and

continuing said deposition until an acceptable film thickness of said carbon doped SiO₂ film is reached.

36.(New) The method of claim 35, wherein the one of dimethylsilane, trimethylsilane, and tetramethylsilane comprises tetramethylsilane.

37.(New) The method of claim 36, wherein the flowing of the oxygen is performed at a flow rate of from about 50 to 300 sccm, the flowing of the tetramethylsilane is performed at a flow rate of between about 400 and 800 sccm, and the flowing of the argon is performed at a flow rate of between about 50 and 300 sccm.

38.(New) The method of claim 35, wherein the plasma generating step is performed at a temperature between about 300°C and 400°C, an RF power from about 600 to 800 Watts, and a pressure between about 1.5 and 4 Torr.

39.(New) The method of claim 35, wherein the carbon doped SiO₂ film is deposited to a thickness of about 4000 to 8000 Angstroms.

40.(New) The method of claim 35, wherein the flowing and generating steps are performed in a CVD process chamber.

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41.(New) The method of claim 35, wherein the deposition rate of said carbon doped SiO₂ film is from about 5000 to 8000 Angstroms per minute.

42.(New) A method of depositing a carbon doped SiO₂ film on a substrate, the method comprising the steps of:

flowing oxygen, argon, and one of dimethylsilane, trimethylsilane, and tetramethylsilane, over the substrate;

generating a plasma to deposit the carbon doped SiO₂ film on the substrate; and continuing said deposition until an acceptable film thickness of said carbon doped SiO₂ film is reached,

wherein the deposition rate of the carbon doped SiO₂ film is from about 5000 to 8000 Angstroms per minute.